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- (71) Applicant (for all designated States except US): **LIQUID-PISTON, INC.** [US/US]; 77 Kirkwood Road, West Hartford, CT 06117 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **SHKOLNIK, Alexander, Cerge** [US/US]; 106r Sciarappa Street, Cambridge, MA 02141 (US). **SHKOLNIK, Nikolay** [US/US]; 77 Kirkwood Road, West Hartford, CT 06117 (US).
- (74) Agents: **BELOBORODOV, Mark, L.** et al.; Testa, Hurwitz & Thibault, LLP, High Street Tower, 125 High Street, Boston, MA 02110 (US).
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(54) Title: HAYBRID CYCLE COMBUSTION ENGINE AND METHODS

(57) Abstract: An improved internal combustion engine of the four-stroke variable volume type operates by refraining from introducing substantial fuel into the working medium during the compression stroke until substantially maximum pressure of the working medium has been reached and utilizing at least one of the following processes: (a) causing combustion of fuel under substantially constant volume conditions; and (b) causing the power stroke to provide a larger volume to combustion products than the compression stroke provides to the working medium. Related methods are also provided.